

Atlantic Richfield Company

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April 7, 2014

Mr. Steven Way
On-Scene Coordinator
Emergency Response Program (8EPR-SA)
US EPA Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

Delivered via e-mail

**Subject: March 2014 Monthly Progress Report
Rico-Argentine Mine Site – Rico Tunnels
Operable Unit OU01, Rico, Colorado**

Dear Mr. Way,

This progress report describes activities conducted during the month of March 2014 at the Rico-Argentine Mine Site (site) and activities anticipated to occur during the upcoming month. These activities are organized by task as identified in the Removal Action Work Plan. This progress report is being submitted in accordance with Paragraph 35.a of the Unilateral Administrative Order for Removal Action (the "UAO"), dated March 17, 2011.

ACTIVITIES FOR MARCH

This section describes significant developments during the preceding period including actions performed and any problems encountered during this reporting period.

Site-Wide Activities

- Submitted road use permit application to the U.S. Forest Service for continued use of the St. Louis Ponds Road on March 30, 2014.
- On March 31, 2014, received notice of EPA's approval for certain modifications to Work Plan scheduling requirements.

Task A – Pre-Design and Ongoing Site Monitoring

- Submitted and posted the Final November 2013 Surface Water and Ground Water Sampling and Flow Monitoring Reports to the project SharePoint site.
<https://www.aecomonline.net/projects/Rico/>
- Reviewing February 2014 Quarter 1 Surface Water and Ground Water Sampling and Flow Monitoring Report prior to final submittal to EPA and posting to the project SharePoint site.
- Performed additional evaluation of potential improvements on surface water flow data gathering and telemetry. Continued work on the application for an antenna permit with the Town of Rico.

Task B – Management of Precipitation Solids in the Upper Settling Ponds

- The St. Louis Tunnel discharge was routed to Pond 15 during the Month of March 2014.
- On March 25, 2014, the site was accessed to observe the diversion pipeline used for directing flow during dredging operations from the Pond 15 outlet, due to a possible problem spotted from Highway 145. The diversion pipe had separated from the Pond 15 outlet culvert and water was

observed backing up in the diversion pipe and flowing out at the end of the pre-existing Pond 15 outlet culvert. Prior to adding the diversion pipeline, the water from Pond 15 flowed into Pond 14 at the same location. Adequate rip rap is in place to protect the Pond 15 south dike from erosion. The diversion pipeline was opened to Pond 12 to release a portion of the head pressure on the diversion pipe at the Pond 14 inlet. After opening the pipeline to Pond 12 water was observed flowing into Pond 14 through the diversion pipeline, the Pond 15 outlet culvert and into Pond 12 through the diversion pipeline.

Task C – Design and Construction of a Solids Repository

- Submitted the Dolores County Land Use Application and associated documents for a Certificate of Designation for the solids repository.
- Attended Dolores County Planning Commission meeting on March 31, 2014 and presented plan for the Solids Repository.
- Continued work to secure lands needed for a permanent solids repository.
- Completed development of the Request for Proposal (RFP) documents for construction of the Phase 1 solids repository.
- On March 18, 2014, received EPA response to AR's February 21, 2014 letter to EPA summarizing efforts taken to date to secure access for Phase 1 repository construction and request for assistance from EPA in gaining additional access needed. On March 20, 2014, received copies of EPA letters sent to other partial owners of the Denver and Big Strike claims providing notice of solids repository construction.
- On March 20, 2014, received comments from Colorado Department of Public Health and Environment (CDPHE) regarding the Solids Repository Engineering Design and Operations Plan EDOP.

Task D – Hydraulic Control Measures for the Collapsed Area of St. Louis Tunnel Adit

- Continued design of the proposed St. Louis Tunnel hydraulic control remedy.

Task E – Source Water Investigations and Controls

- Completed and submitted to the EPA on March 31, 2014, the *St. Louis Tunnel Discharge Source Mine Water Treatability Study Completion Report* documenting the results of the 2012 and 2013 St. Louis Tunnel Discharge Source Mine Water Treatability Studies.

Task F – Water Treatment System Analysis and Design

- Continued pilot-scale wetland treatability study activities.
 - Flow through the pilot-scale wetland will be maintained until the matrix materials from the rock drain and wetland cell are re-used as inoculum for the wetland demonstration.
- Continued wetland demonstration treatability study activities.
 - Issued a RFP for construction of the wetland demonstration project.
 - Conducted a pre-bid meeting and site walk with prospective bidders on March 25, 2014. Potential bidders observed the site from overlooks along Colorado State Highway 145; but did not access the site due to snow accumulation.
 - Completed and submitted to the EPA on March 31, 2014, the revised *St. Louis Tunnel Discharge Constructed Wetland Demonstration Treatability Study Work Plan* and the associated *Performance Monitoring Plan* documenting the changes to the wetland demonstration design, per the *St. Louis Tunnel Discharge Constructed Wetland Demonstration Treatability Study Unified Wetland Design and Technical Specifications*, which were submitted to the EPA on December 31, 2013.



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ACTIVITIES FOR UPCOMING MONTH

This section describes developments expected to occur during the upcoming reporting period, including a schedule of work to be performed, anticipated problems and planned resolution of past or anticipated problems.

Site-Wide Activities

- None.

Task A – Pre-Design and Ongoing Site Monitoring

- Inspect the St. Louis Ponds System, water levels and free-board.
- Review the February 2014 Quarter 1 Surface Water and Ground Water Sampling and Flow Monitoring Reports and post to the project SharePoint site.
<https://www.aecomonline.net/projects/Rico>
- Initiate updates to the 2013 site *Sampling and Analysis Plan for Surface Water and Groundwater* and *Quality Assurance Project Plan for Surface Water and Groundwater* to document changes to surface water and groundwater monitoring program.
- Continue work on submittal and processing of the application for a telemetry antenna permit for the Rico office building.

Task B – Management of Precipitation Solids in the Upper Settling Ponds

- Inspect the Pond 15 outlet; observe any changes in erosion and in flow pattern.
- Continue routing St. Louis Tunnel discharge to Pond 15.
- Prepare the 2014 Pond 14 Solids Removal Work Plan.
- Begin working on the 2014 Marine Assurance Plan and Marine Emergency Response Plan.

Task C – Design and Construction of a Solids Repository

- Continue work to secure the Dolores County Land Development Agreement and accompanying Certificate of Designation for the solids repository.
- Continue efforts to secure access to lands needed for a permanent drying facility and solids repository.
- Respond to CDPHE comments on the EDOP.
- Issue the RFP documents for construction of the Phase 1 solids repository to bidders and conduct pre-bid meeting at site.

Task D – Hydraulic Control Measures for the Collapsed Area of St. Louis Tunnel Adit

- Continue detailed design for the hydraulic control measures for the collapsed area of the St. Louis Tunnel (adit) and submit design report to EPA.

Task E – Source Water Investigations and Controls

- None.

Task F – Water Treatment System Analysis and Design

- Continue pilot-scale wetland treatability study activities.
 - Maintain flow through the pilot-scale wetland until the matrix materials from the rock drain and wetland cell are re-used as inoculum for the wetland demonstration.
- Continue wetland demonstration treatability study activities.
 - Receive and evaluate wetland demonstration project bids.
- Continue scoping additional data needs as necessary related to treatment system alternatives.



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If you have any questions, please feel free to contact me at (951) 265-4277.

Sincerely,



Anthony R. Brown
Project Manager
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